Please type a plus sign (+) inside this box -> +	Please	type a	plus sign	(+)	inside	this	box	<b>→</b>	4	_
--	--------	--------	-----------	-----	--------	------	-----	----------	---	---

PTO/SB/08A (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO
SINFORMATION DISCLOSURE
STATEMENT BY APPLICANT

Complete if Known

Application Number 10/609,005

Filing Date 06/27/2003

First Named Inventor Hubert K. Chow

Group Art Unit 1762

Examiner Name

Attorney Docket Number ASCPT02D2

(use as many sheets as necessary)

Sheet 1 of 4

				U.S. PATENT DOCL	IMENTS	
Examiner Initials*	Cite No.1	Mumber	ument nd Code <sup>2</sup> known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A	3,579,721		KALTENBACH	05/25/1971	
	В	3,607,169		COXE	09/21/1971	
	С	3,765,853	1	RIEBLING	10/16/1973	
	D	3,817,502		TAYLOR	06/18/1974	
	E	3,826,598		KAUFMANN	07/30/1974	
	F	4,097,266	T	TAKAHASHI et al.	06/27/1978	
	G	4,162,282		FULWYLER et al.	07/24/1979	
	Н	4,179,278	1	BEGGS et al.	12/18/1979	
	I	4,216,178	1	ANDERSON	08/05/1980	
	J	4,302,166	$\top$	FULWYLER et al.	11/24/1981	
	K	4,346,387		HERTZ	08/24/1982	
	L	4,385,013		COULING et al.	05/24/1983	
	М	4,463,359		AYATA et al.	07/31/1984	
	N	4,705,656		ONOYAMA et al.	11/10/1987	
	0	4,795,330		NOAKES et al.	01/03/1989	
	P	4,929,400		REMBAUM et al.	05/29/1990	
	0	5,136,515		HELINSKI	08/04/1992	
	R	5,191,929		KUBOTA et al.	03/09/1993	
	S	5,226,098		HIROSAWA	07/06/1993	
	т	5,226,948	1	ORME et al.	07/13/1993	

				FORE	IGN PATENT DOCUMEN	rs		
	0	F	oreign Patent Do	cument	Name of Patentee or	Date of Publication of	Pages, Columns, Lines, Where Relevant	T
Examiner Initials*	Cite No. <sup>1</sup>	Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)	Applicant of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear	T <sup>6</sup>
								┸
							<u>.</u>	╄┦
		<u> </u>						╂╌┦
		<u> </u>						+
		╂┈╂┈	<u>.</u>	<del></del>	<del> </del>	<del>                                     </del>		1-
		<del>  </del>				1		
		<del>                                     </del>						

Examiner	Date Considered
Signature	Considered

<sup>\*</sup>EXAMINER: Please Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+) insid	e this box →	+
-----------------------------------	--------------	---

PTO/SB/08A (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

of Sheet

Solid to a collection of informatio	THE GIVES A CORRESTS & VAIIG CHIE CONTROL HUMBEL.				
C mpl t if Known					
Application Number	10/609,005				
Filing Date	06/27/2003				
First Named Inventor	Hubert K. Chow				
Group Art Unit	1762				
Examiner Name					
Attorney Docket Number	ASCPT02D2				

	•			U.S. PATENT DOCL	IMENTS	
Examiner Initials	Cite No.1	I Number .	ıment d Code² known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	U	5,229,016		HAYES et al.	07/20/1993	
	V	5,250,103		YAMAUCHI et al.	10/05/1993	
	W	5,261,611		HUXFORD	11/16/1993	
	Х	5,266,098	T	CHUN et al.	11/30/1993	
	Y	5,285,934		YAMAUCHI et al.	02/15/1994	
	Z	5,321,583		McMAHON	06/14/1994	
	AA	5,411,602		HAYES	05/02/1995	
	BB	5,520,371		MILLER et al.	05/28/1996	
	CC	5,520,715		OEFTERING	05/28/1996	
	DD	5,550,044		KOSAK et al.	08/27/1996	
	EE	5,560,543	$\mathbf{I}$	SMITH et al.	10/01/1996	
	FF	5,736,200		BEARDSLEY et al.	04/07/1998	
	GG	5,761,779		MARUYAMA et al.	06/09/1998	
	нн	5,810,988		SMITH JR. et al.	09/22/1998	
	II	5,891,212		TANG et al.	04/06/1999	
	JJ	5,935,406		HAJMRLE et al.	08/10/1999	
	KK	5,938,102		MUNTZ et al.	08/17/1999	
	LL	5,993,509		TSAO et al.	11/30/1999	
	MM	6,029,909		SMITH	02/29/2000	
	NN	6,083,454		TANG et al.	07/04/2000	

				FORE	IGN PATENT DOCUMEN	rs		
	0:1-	F	oreign Patent Do		Name of Patentee or	Date of Publication of	Pages, Columns, Lines, Where Relevant	
Examiner Initials*	Cite No.1	Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)	Applicant of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear	1e
						<u> </u>		-
		<u> </u>						╁┈
		<del> </del>						╁
						ļ <u> </u>		╄-
						<del>                                     </del>		╆
<u> </u>		<del> </del>		<del></del>		<del> </del>		+

Examiner	Date
	Considered
Signature	Considered

<sup>\*</sup>EXAMINER: Please Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Please type a plus sign (+	) inside this box →	+
----------------------------	---------------------	---

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

## 넘INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

of Sheet 3

Compl t if Known				
Application Number	10/609,005			
Filing Date	06/27/2003			
First Named Inventor	Hubert K. Chow			
Group Art Unit	1762			
Examiner Name				
Attorney Docket Number	ASCPT02D2	J		

				U.S. PATENT DOCU	JMENTS	
Examiner	Cite	Kind Code*		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant
			(if known)			Figures Appear
	00	6,202,734	B1	SACKINGER et al.	03/20/2001	
	PP	6,230,786	B1	СНОЅНІ	05/15/2001	
	QQ	5,171,360		ORME et al.	12/15/1992	
	RR	4,035,116		O'BRIEN ET AL.	07/12/1977	
	SS	6,461403		OLSEN	10/08/2002	
	TT	4,428,894		BIENVENU	01/31/1984	
	UU	3,771,929		HELLMAN ET AL.	11/13/1973	
	vv	4,469,313		ICHIDATE ET AL.	09/04/1984	
	ww	4,264,641		MAHONEY ET AL.	04/28/1981	
	XX	4,162,282		FULWYLER ET AL.	07/24/1979	
	YY	4,346,387		HERTZ	08/24/1982	
	ZZ	4,181,522		GALEY ET AL.	01/01/1980	
	AAA	4,237,695		OBERPRILLER ET AL.	12/09/1980	
	BBB	1		WATTS	04/08/1986	
		<del>                                     </del>			1	

FOREIGN PATENT DOCUMENTS										
Examiner Initials*			Foreign Patent D	Kind	Code <sup>5</sup>	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sub>e</sub>	
	CCC	SU	1682039		A1	BEZRUKOV	10/17/1988	PAGE 4 (FIGURE)		
		_								
		$\vdash$								

Examiner	Date	
Examine	Considered	
Signature	Considered	

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

<sup>\*</sup>EXAMINER: Please Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Please	tvoe a	olus	sian	(+)	inside	this	box	→		⊏
1 16036	type a	pius	Jigii	۲.,	110100			_,	. –	_

PTO/SB/08B (08-00)
Please type a plus sign (+) inside this box 

Approved for use through 10/31/2002. OMB 0651-0031

U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

Sheet

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary) of

C mplet if Kn wn					
Application Number					
Filing Date	06/27/2003				
First Named Inventor	Hubert K. Chow				
Group Art Unit	1762				
Examiner Name					
Attorney Docket Number	ASCPT02D2				

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>			
	AB	SHORTLEY et al; Elements of Physics; Textbook; 1953; Prentice Hall, Inc.; New Jersey; pp 140 and 141				
	AC	SWANSON; Fluid Mechanics; Textbook; 1970; Holt Binehart & Winston, Inc.; New York; pp 78 and 79				
	<u> </u>					

Examiner Signature	Date Considered	
u Oignataio		

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.